

CLAIMS LISTING

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-5: (Canceled)

Claim 6: (Previously Presented) An amusement device for providing a sense of excitement to one or more persons using the amusement device, said amusement device comprising:

- (a) a detachable and movable track section adapted to support a track-following vehicle, the vehicle being sufficiently large to carry one or more of said persons using the amusement device, the movable track section being elongated to generally define a corresponding first axis of elongation;
- (b) a driving system adapted to move the movable track section between a relatively low first position and a higher second position;
- (c) a tilter operatively coupled to the movable track section to cause the first axis of elongation of the movable track section to be tilted into a substantially horizontal first angle when the movable track section is in said first position and to cause the first axis of elongation to be tilted into a substantially non-horizontal second angle when the movable track section is in said second position, the second angle being sufficiently non-horizontal so that if the vehicle and vehicle-carried riders are supported by the movable track section at the time its first axis attains said second angle, the second angle provides a sense of enhanced excitement to the one or more persons carried in the vehicle beyond excitement provided merely by the vehicle and movable track section being at said higher second position; and
- (d) at least one track-continuation section to which the movable track section detachably attaches so that said track-following vehicle can move between a first support state in which the vehicle is supported by the movable track section and a second support state in which the vehicle is supported by the at least one track-continuation section, the movement of the track-following vehicle between the first and second support state occurring when the movable track section is attached to the at least one track-continuation section.

Claim 7: (*Previously Presented*) The amusement device of Claim 6 wherein:

(c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

Claim 8: (*Previously Presented*) The amusement device of Claim 7 wherein:

(d.1) a first of said at least one track-continuation sections is located at the higher second position and is adapted to allow the vehicle to directly follow the first track-continuation section under force of gravity when the vehicle is released from the attached, movable track section while said substantially non-horizontal second angle is attained.

Claim 9: (*Previously Presented*) The amusement device of Claim 6 wherein:

(c.1) the tilter tilts the first axis of elongation of the movable track section between the first and second angles at a same time while the driving system is moving the movable track section between the first and second positions.

Claim 10: (*Previously Presented*) The amusement device of Claim 6 wherein:

(c.1) the tilter tilts the first axis of elongation of the movable track section to the second angle after the driving system has moved the movable track section to a position at or substantially near the second position.

Claim 11: (*Previously Presented*) The amusement device of Claim 6 wherein:

(c.1) the tilter includes a guide rail that operatively couples to the movable track section while the movable track section is moving between the first and second positions, where the guide rail controls the angle of the first axis of elongation relative to the horizontal.

Claim 12: (*Previously Presented*) The amusement device of Claim 11 wherein:

(c.1a) the guide rail includes a circular arc portion.

Claim 13: (*Previously Presented*) The amusement device of Claim 11 wherein:

(c.1a) the guide rail includes a substantially vertical portion.

- Claim 14: *(Previously Presented)* The amusement device of Claim 11 wherein:
- (c.2) the tilter includes a support structured to support the movable track section so that its first axis of elongation maintains a predefined third angle relative to a corresponding tangent of the guide rail while the movable track section moves in operative intercoupling with guide rail.
- Claim 15: *(Previously Presented)* The amusement device of Claim 14 wherein:
- (c.2a) the third angle is about 90 degrees.
- Claim 16: *(Previously Presented)* The amusement device of Claim 6 wherein:
- (d.1) said driving system includes a first cable operatively coupled to pull the movable track section up from the lower first position to the higher second position; and
- (d.2) said driving system includes a second cable operatively coupled to pull the movable track section down from the higher second position to the lower first position.
- Claim 17: *(Previously Presented)* The amusement device of Claim 16 wherein:
- (d.1) said driving system includes a third cable operatively coupled to apply a counterweight force against the weight of at least one of said movable track section and said vehicle.
- Claim 18: *(Previously Presented)* The amusement device of Claim 17 wherein:
- (d.1a) said third cable defines a safety loop with two opposed parts of the safety loop connected to the movable track section.
- Claim 19: *(Previously Presented)* The amusement device of Claim 17 wherein:
- (d.1a) said third cable is coupled to a cylinder-piston combination which provides said counterweight force and inhibits the movable track section from falling rapidly in a case where the first cable fails to adequately support the movable track section.
- Claim 20: *(Previously Presented)* The amusement device of Claim 6 wherein:
- (d.1) a first of said at least one track-continuation sections is located at the higher second position and is angled according to said substantially non-horizontal second

angle so that the vehicle can continue its track-following motion at said second angle when moving between the movable track section and the first track-continuation section.

Claim 21: *(Previously Presented)* The amusement device of Claim 20 wherein:

(d.2) a second of said at least one track-continuation sections is located at the lower first position and is angled according to said substantially horizontal first angle so that the vehicle can continue its track-following motion at said first angle when moving between the movable track section and the second track-continuation section.

Claim 22: *(Previously Presented)* The amusement device of Claim 21 wherein:

(d.3) both of the first and second track-continuation sections extend in a generally same continuation direction so that a vehicle moving from one of the first and second track-continuation sections to the other by way of said movable track section undergoes a reversal of traveling direction, entering the movable track section while moving in a first traveling direction defined by said continuation direction and leaving the movable track section while moving in an opposite second traveling direction, and also experiencing a change of elevation in switching from one of the first and second track-continuation sections to the other.

Claim 23: *(Previously Presented)* The amusement device of Claim 6 and further comprising:

(e) a first multi-section track-following vehicle adapted to carry a plurality of persons, where the movable track section is at least as long as the multi-section vehicle.

Claim 24: *(Previously Presented)* The amusement device of Claim 23 and further comprising:

(f) a boarding station at which passengers can board said first multi-section track-following vehicle;

(d.1) wherein a first of said at least one track-continuation sections is located at the lower first position and is and is angled according to said substantially horizontal first angle so that the first vehicle can continue its track-following motion at said first angle

when moving between the movable track section and the first track-continuation section; and

(f.1) the boarding station is located along the first track-continuation section and spaced sufficiently away from said movable track section so that a second multi-section track-following vehicle can stop in the boarding station for boarding of additional passengers while the first multi-section track-following vehicle is being moved between the first and second positions while supported by the movable track section.

Claim 25: *(Previously Presented)* The amusement device of Claim 6 wherein:

(a.1) said track section has an axis of tilt approximately midway along its first axis of elongation.

Claim 26: *(Previously Presented)* A method for operating an amusement device so as to provide a sense of excitement to one or more persons using the amusement device, said method comprising:

- (a) supporting a first track-following vehicle on a movable track section, the vehicle being sufficiently large to carry one or more of said persons using the amusement device, the movable track section being elongated to generally define a corresponding first axis of elongation;
- (b) moving the movable track section between a relatively low first position and a higher second position while the first vehicle is supported by the movable track section; and
- (c) while the first vehicle is supported by the movable track section, tilting the movable track section so as to cause the first axis of elongation of the movable track section to be tilted at a substantially horizontal first angle when the movable track section is in said first position and to cause the first axis of elongation to be tilted at a substantially non-horizontal second angle when the movable track section is in said second position, the second angle being sufficiently non-horizontal so that if the supported vehicle carries one or more passengers at the time the first axis attains said second angle, the second angle provides a sense of enhanced excitement to the one or more passengers beyond excitement provided merely by the vehicle and movable track section being at said higher second position.

Claim 27: *(Previously Presented)* The operating method of Claim 26 and further comprising:

(d) detachably attaching the movable track section to at least one track-continuation section so that said track-following vehicle can move between a first support state in which the vehicle is supported by the movable track section and a second support state in which the vehicle is supported by the at least one track-continuation section, the movement of the track-following vehicle between the first and second support state occurring when the movable track section is attached to the at least one track-continuation section.

Claim 28: *(Previously Presented)* The operating method of Claim 27 wherein:

(c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

Claim 29: *(Previously Presented)* The amusement device of Claim 28 wherein:

(d.1) a first of said at least one track-continuation sections is located at the higher second position and is adapted to allow the vehicle to directly follow the first track-continuation section under force of gravity when the vehicle is released from the attached, movable track section while said substantially non-horizontal second angle is attained.

Claim 30: *(Previously Presented)* The operating method of Claim 26 wherein:

(c.1) said substantially non-horizontal second angle is in the order range of 30 to 90 degrees away from the horizontal.

Claim 31: *(Previously Presented)* The operating method of Claim 26 wherein said moving of the movable track section includes:

(b.1) using a first cable to pull the movable track section up from the lower first position to the higher second position.

Claim 32: *(Previously Presented)* The operating method of Claim 31 wherein said moving of the movable track section includes:

(b.2) using a second cable to pull the movable track section down from the higher second position to the lower first position.

Claim 33: *(Previously Presented)* The operating method of Claim 32 wherein said moving of the movable track section includes:

(b.1) using a third cable to apply a counterweight force against the weight of at least one of said movable track section and said vehicle.

Claim 34: *(Previously Presented)* The operating method of Claim 26 wherein said moving of the movable track section includes:

(b.1) using a piston-cylinder combination to apply a dynamically damped, counterweight force against the weight of at least one of said movable track section and said vehicle.
